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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,396	03/04/2002	Steven M. Chinitz	DP-305987	1502

7590

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EXAMINER

DAVIS, OCTAVIA L

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/091,396

Applicant(s)

Chinitz et al

Examiner

Octavia Davis

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Serial Number: 10/091, 396

Art Unit: 2855

DETAILED ACTION

Inventorship

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4 - 6, 8 - 10, 12 - 14, 17, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Hilby et al.

Regarding claims 1, 6 and 12, Hilby et al disclose a bearing assembly comprising a bearing assembly 12 including an outer stationary race 20, an inner rotatable race 30 attached to the stationary race, the inner race 30 comprising an inboard member 32 and an outboard member 34, a portion of each race including a portion of spaced apart seals 70, 72 and a sensor 50 disposed between the bearing seals, the sensor having an output used for determining a force applied to the rotatable section (See Cols. 3 and 4, lines 7 - 26 and 3 - 6, See Fig. 1).

Regarding claim 4, the sensor 50 includes a stress based load sensor (See Col. 3, lines 38 - 42).

Regarding claims 5 and 8, the stationary or first race 20 and the rotatable or second race 30 define a raceway, the wheel bearing assembly includes rolling elements 40 disposed in the raceway and the sensor 50 senses the passage of the rolling elements around the raceway past the sensor (See Col. 3, lines 64 - 68).

Regarding claims 9 and 10, the sensor 50 is attached to the rotatable race 30 (See Fig. 1).

Regarding claims 13, 14, 17 and 18, the non-rotatable race includes a hub and the sensor is attached to the hub (See Col. 4, lines 8 - 10).

Regarding claim 20, a controller is used for controlling the vehicle based in part on the determined component (See Col. 3, lines 51 - 55).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 7, 11, 15, 16, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilby et al in view of French et al.

Regarding claims 2, 3, 7, 15, 16, 19 and 21, Hilby et al lack the component being an input to a vehicle control system. However, French et al disclose a bearing having sensors comprising a sensor module B of which contains a plurality of different sensors, including a speed sensor 110, a temperature sensor 112 and an acceleration sensor 114, the outputs of any one or all of the respective sensors being provided to a vehicle control system (See Cols. 3, 5, 6 and 7, lines 63 - 65, 33 - 67, 1 - 9 and 58 - 61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hilby et al according to

the teachings of French et al for the purpose of, detecting different operating conditions and physical characteristics of a bearing.


6. Any inquiry concerning this communication should be directed to Examiner Octavia Davis at telephone number (703) 306 - 5896. The examiner can normally be reached on Monday - Thursdays (9:00 - 5:00), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on (703) 305 - 4816. The fax phone number for the organization where this application or proceeding is assigned is (703) 746 - 4409.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0956.

OD/2855

4/2/03



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